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#### State of California AIR RESOURCES BOARD

### EXECUTIVE ORDER A-8-99 Relating to Certification of New Motor Vehicles

#### BAYERISCHE MOTOREN WERKE AG

Pursuant to the authority vested in the Air Resources Board by the Health and Safety Code, Division 26, Part 5, Chapter 2; and

Pursuant to the authority vested in the undersigned by Health and Safety Code Sections 39515 and 39516 and Executive Order G-45-9;

IT IS ORDERED AND RESOLVED: That 1997 model-year Bayerische Motoren Werke AG exhaust emission control systems are certified as described below for passenger cars:

Fuel Type: Gasoline

Engine Family: VBM4.4VJGKEK <u>Displacement</u>: 4.4 Liters (268.4 Cubic Inches)

Exhaust Emission Control Systems and Special Features:

Dual Three Way Catalytic Converters Dual Heated Oxygen Sensors (two) Sequential Multiport Fuel Injection

Vehicle models, transmissions, engine codes and evaporative emission control families are listed on attachments.

The certification exhaust emission standards for this engine family in grams per mile are:

Miles	Non-Methane	Carbon	Nitrogen	Carbon
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20<sup>0</sup>F)</u>
50,000	0.25	3.4	0.4	10.0
100,000	0.31	4.2	0.6	n/a

The certification exhaust emission values for this engine family in grams per mile are:

<u>Miles</u>	Non-Methane	Carbon	Nitrogen	Carbon	
	<u>Hydrocarbons</u>	<u>Monoxide</u>	<u>Oxides</u>	<u>Monoxide (20<sup>0</sup>F)</u>	
50,000	0.14	1.1	0.2	7.0	
100,000	0.16	1.3	0.2	n/a	

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the aforementioned exhaust emission standards based on its submitted plan to comply with the fleet average non-methane organic gas (NMOG) exhaust mass emission requirements as set forth in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That under the submitted NMOG fleet average compliance plan, if the manufacturer incurs a NMOG debit for the aforementioned model year based on the projected NMOG fleet average exceeding the value required by the above-referenced standards and test procedures, all incurred NMOG debits by the manufacturer shall be equalized as required by the standards and test procedures.

BE IT FURTHER RESOLVED: That the vehicle manufacturer is certifying the listed vehicle models to the 50,000-mile evaporative emission standards applicable to 1980 through 1994 model-year vehicles in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles", and the listed vehicle models comply with those standards.

BE IT FURTHER RESOLVED: That, based on the evaporative emission phase-in compliance schedule submitted by the vehicle manufacturer, the listed vehicle models shall not be subject to the running loss and useful life standards set forth in the "California Evaporative Emission Standards and Test Procedures for 1978 and Subsequent Model Motor Vehicles."

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "California Motor Vehicle Emission Control Label Specifications" for the aforementioned model year (Title 13, California Code of Regulations, Section 1965).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's "Specifications for Fill Pipes and Openings of Motor Vehicle Fuel Tanks" for the aforementioned model year (Title 13, California Code of Regulations, Section 2235).

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the Board's high-altitude requirements and highway emission standards, and with the California Inspection and Maintenance emission standards in place at the time of certification, as stipulated in "California Exhaust Emission Standards and Test Procedures for 1988 and Subsequent Model Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles".

BE IT FURTHER RESOLVED: That the listed vehicle models also comply with the "Malfunction and Diagnostic System Requirements--1994 and Subsequent Model-Year Passenger Cars, Light-Duty Trucks, and Medium-Duty Vehicles and Engines" (Title 13, California Code of Regulations, Section 1968.1) for the aforementioned model year.

BE IT FURTHER RESOLVED: That for the listed vehicles, the manufacturer has submitted and the Executive Officer hereby approves the materials to demonstrate certification compliance with the Board's emission control system warranty provisions (Title 13, California Code of Regulations, Section 2035 et seq.).

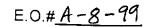
Vehicles certified under this Executive Order must conform to all applicable California emission regulations.

The Bureau of Automotive Repair will be notified by copy of this order and attachment.

Executed at El Monte, California this 4th day of April 1996.

R. B. Summerfield

Assistant Division Chief Mobile Source Division





## 1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT DUTY TRUCKS AND MEDIUM DUTY VEHICLES

Manufacturer: BMW Exh Engine Family: VBM4.4VJGKEK Evap. Fam: VBM1045CYMA	5(15cm)
VBM1035DYPAC	
VBM1045CVDAC	
All Eng Codes in Eng Fam: CA 49S 50S X AB965	
Exh Std: CA Tier-1 X TLEV LEV ULEV ZEV ; US EPA Tier-1 >	,
Evap Std: 50K X Useful Life with R/L In-Use Exh Std: Full In Use X Alt in Use	
Veh Class(es): PC X LDT1 LDT2 MDV1 MDV2 MDV3 MDV4 MDV5	
Single Cert Std for Multi - Class Eng Fam: N/A (specify: N/A, LDT1, MDV1, MDV2, MDV3, MDV4)	_
Fuel Type (s): Dedicated X Flex-Fuel Dual Fuel Bi - Fuel Gasoline X Diesel	
CNG ING LDC Mar Gasoline X Diesel	
CNG LNG LPG M85 Other (specify)	
Emiss Test Fuel (s): Indo Ph2 X CNG LPG M85 Other (specify)	_
Diesei: 13 CCR 2282 40 CFR86 113-90 40 CFR86 113-04	
Service Accum. Sid AMA Mod AMA Mfr ADP X Other (specify)	
NWOG Test Procedure: N/A X Std Equiv R/I Test Proce SHED Dt Source	_
Hybrid: Type A B C APU Cycle (e.g., Otto, Diesel, Turbine)	
FUNIDA L'ODIAURANON: M. Displace de la companya della companya de la companya della companya del	_
Valves per Cylinder: 4.4 Liters 268.4 Cubic Inches	
Valves per Cylinder: 4 Rated HP: 282 @ 5 700 RPM	
Engine: Front X Mid Rear Drive: FWD RWD X 4WD-FT 4WD-PT	
Exhaust ECS: 2TWC,2 HO2S-2, SFI	-
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Engine Code (50 ST)	Vehicle Models	Trans. Type	ETW (lbs.)	DPA or RLHP (hp)	Ignition (ECM/PCM) Part No.	EGR System Part No.	Catalytic Converter Part No.
4.4/7 A5	740i, iL	L5	4 500	7.3	1 472 350		1 745 243
4 4/8 A5	840Ci	L5/MS	4 500	7.5	1 427 348		1 745 244
4.4/5 A5	540iA	L5	4 000	7.6	1 429 360		
4.4/5 M6	540i	M6	4 000	8.1	1 429 359		
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# 1997 AIR RESOURCES BOARD SUPPLEMENTAL DATA SHEET PASSENGER CARS, LIGHT DUTY TRUCKS AND MEDIUM DUTY VEHICLES 6.571

Mar	nufacturer : BMW	Exh Engine f	Family: VBM4.4	VJGKEK Evap. Fa	am: VBM1045CYMA0 (7-50) VBM1035DYPA0(8-2010)
Exh Eva Veh Sing Fue Emis Serv NMO Hybr Engi Valv Engi	Class(es): PC X LI gle Cert Std for Multi - Cla l Type (s): Dedicated	ful Life with R/L  ful Life with R/L  DT1LDT2  ss Eng Fam:N/    X Flex-Fuel    LNGLPG    Ph2X CNG  CCR 2282    Mod AMA    StdEqui     StdEqui    Displacement:  RearDrivi	MDV1M /A	Std: Full In Use DV2 MDV3  N/A, LDT1, MDV1, I Bi - Fuel G Other (specify)  M85 Other ( 90 40 CFR86.  Other (specify)  Proc: SHED Sel, Turbine)	VBM1045CYPA0(s-smc)  ; US EPA Tier-1 X  ( Alt In Use MDV4 MDV5 MDV2, MDV3, MDV4) asoline X Diesel  specify) 113-94  Pt Source Cubic Inches 5 700 RPM
			72		
		Section			Section
1	Authorized Representative	01.00.00	21 Ger	n Std, Increase in Emis	ssions
2	Fuel Specifications	03.00.00	Saf	ety, Meets all Requirer	ments 20.10.00
3	Test Equipment	04.00.00	22 Em	iss. Label Durability St	. 17.01.00
4	Test Procedure	05.00.00	23 Driv	eability Statement	17.01.00
5	Mileage Accumulation Rol	ite 05.00,00	24 Adji	ustable Parameters	n/a
6 7	Emiss.Warranty Statemen	•	25 Tan	nper Resistance Metho	od(s) none
8	Maint: Cert/Req'd/Recm'd	06.00.00	26 Fill	Pipe Specifications	17.01.00
9	Emiss.Label/Vac. Hose Di	_	27 Higl	Altitude Compliance	17.04.00
10	Evap. Control System Engine Parameters	08.11.00	28 OBI	D Sys.incl.Marked Rev	isions 17.05.00
11	Fuel System	20.01.00	29 I&M	Test Procedure & Dat	a 17.01.00
12	Ignition System	08.01.00	30 50 [	Degree F Compliance	n/a
13	Exhaust Control Systems	08.02.00 08.10.00		ufacturer's RAF	n/a
14	Projected Sales (LDT/MD\	Split) 17.01.00	32 Pha	se In Plans: Exh Cert	
15	Vehicle Description	22.00.00		Exh In-Us	
16	Evap. Bench Test Procedu	re 17.01.00	33 NM(	Evap Cert	
17	R/L Temp & Press Profiles	n/a		DG Fleet Average Cald 65 Credits/Withdrawal	•
18	EDV Selection	17.01.00		Certificate BMW-LD	
19	Prod.Veh.same as Test Ve	h.St. 17.01.00	36	BMW-ID	v-97-03
					v-97-04
20	Test Veh. Information	Durability Data	<b>Emission Data</b>	Emission Data	Emission Data
		Vehicle	Vehicle	Vehicle	Vehicle
	C/O or C/A	C/O 96	C/O 96	1	- CHOIC
	MY & ID.	96 C C61 000	96 D G42 901	97 B R90 002	
	Vehicle Log Page(s)	22.01.00	22.02.00	22.03.00	
	Zero Mile Books	***			
	Maint, Logs & Engr. Eval.	22.01.00	22.02.00	22.03.00	